UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/764,252	01/17/2001	James Russell Godwin	5577-220	8043

20792 7590 11/22/2005

MYERS BIGEL SIBLEY & SAJOVEC
PO BOX 37428
RALEIGH, NC 27627

EXAMINER	
PATEL, ASHOKKUMAR B	

ART UNIT	PAPER NUMBER
2154	

DATE MAILED: 11/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/764,252	GODWIN ET AL.	
	Examiner	Art Unit	
	Ashok B. Patel	2154	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 September 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-57* is/are pending in the application.

4a) Of the above claim(s) *2,21 and 40* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3-20,22-39 and 41-57* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *06/17/2005*.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-57 are subject to examination. Claims 2, 21 and 40 have been cancelled.

Response to Arguments

2. Applicant's arguments filed 09/14/2005 have been fully considered but they are not persuasive for the following reasons:

Independent Claims 1, 10, 20, 29, 39 and 48 are Not Anticipated by Basil

Applicant's argument:

"Accordingly, Basil discloses a multicast system that maps multicast addresses to physical IP addresses. It does not disclose a method for providing secure communications over a network in a distributed network environment. The multicast router (device I 2) of Basil routes inbound communication from one device to many statically mapped devices. Basil does not disclose that the multicast router or any other device serves as a distribution processor that receives network communications directed to common network address and distributes those communications to selected target hosts to distribute workload associated with the network communications.

Accordingly, Applicants submit that at least the above-underlined recitations of Claim 1 are not disclosed by Basil and, consequently, that Claim 1 is not anticipated by Basil."

Examiner's response:

Basil, as shown below in Fig. 1, and the operation of the system depicted in col. 2, line 66 - col. 3, line 54, teaches the Claim 1 limitations.

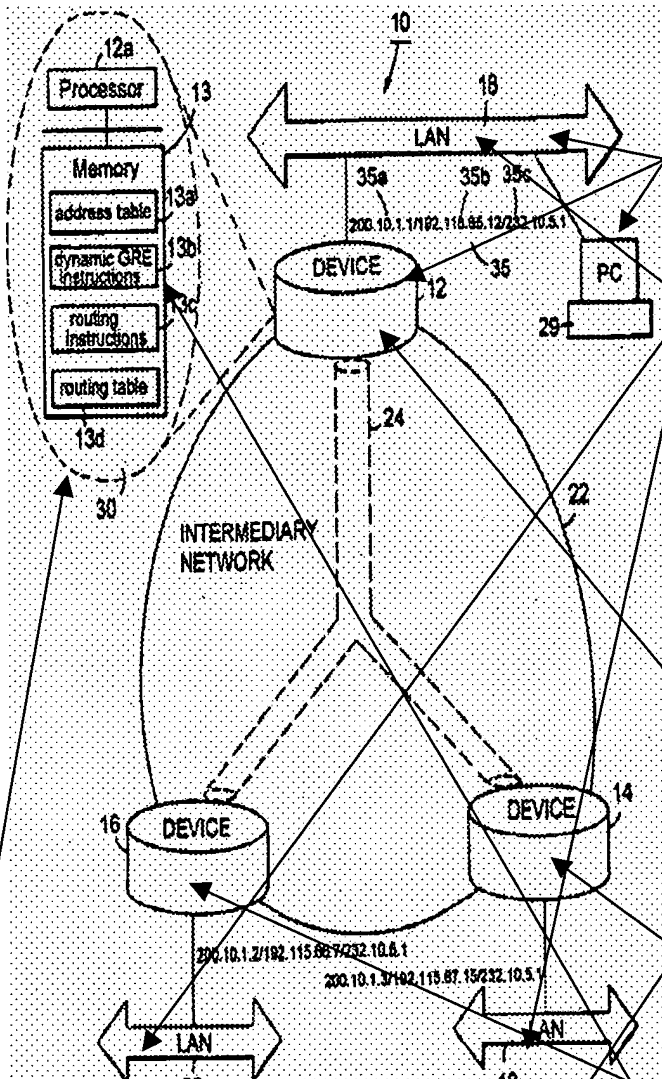

FIG. 1

Included on intermediary network 22 is GRE tunnel 24. Intermediary network 22 has no knowledge, per se, of GRE tunnel 24. The GRE tunnel is known only to the devices at its end points, namely devices 12, 14 and 16. GRE tunnel 24 passes encapsulated data packets between devices at tunnel end points 12, 14 and 16. **Encapsulated packets may be sent to single, or multiple, tunnel end point devices. Devices 12, 14 and 16 are coupled to corresponding LANs 18 to 20.** Each of LANs 18 to 20 supports IPv4 and one or more of the foregoing routing protocols for transmitting data packets between devices on the LAN (e.g., personal computer ["PC"] 29) and a GRE tunnel end point. Since both LANs 18 to 20 and intermediary network 22 support IP, GRE encapsulation (described below) will be IP over IP. **(routing both inbound and outbound communications with target hosts which are associated with a secure network communication through the distribution processor)**

Each tunnel has a multicast address. Each tunnel end point device a physical IP address and a logical IP address. The logical IP address is an IP address that is statically configured over a GRE tunnel end point device. **The physical IP address is the network (IP) address of the end point device and is used by the delivery protocol to deliver data packets through GRE tunnels to remote devices. Devices 12, 14 and 16 are routers, or other computing devices, which receive data packets (either from a GRE tunnel or a LAN) and which forward the data packets to their intended destinations (either via a GRE tunnel or on the LAN).** For example, "local" device 12 receives payload data packets from PC 29 on LAN 18 and forwards those packets to "remote" device 14 via GRE tunnel 24. Similarly, device 12 receives packets from GRE tunnel 24 and forwards those packets onto LAN 18. Whether a device is local or remote is a matter of perspective only. For example, to device 14, devices 12 and 16 are remote. **Each device 12, 14 and 16 includes a memory 13 for storing computer instructions, and a processor 12a for executing those instructions to perform various functions, as shown in blown-up view 30.** For example, routing instructions 13c cause device 12 to forward routing packets in accordance with one or more of the routing protocols noted above. **Dynamic GRE instructions 13b process GRE-encapsulated routing packets transmitted over GRE tunnel 24.(processing both inbound and outbound secure network communications at the distribution processor so as to provide network security processing of communications from the target host and network security processing of communications to the target host)**

Memory 13 also stores an address table 13a and a routing table 13d. In this regard, each device has several associated addresses. For example, device 12 has an address 35 which includes a logical IP address 35a of "200.10.1.1", and a physical IP address 35b of "192.115.65.12". The multicast address 35c ("232.10.5.1") of GRE tunnel 24 is also shown, as are addresses of devices 14 and 16.

Routing table 13d stores network routing information, including the logical IP addresses of devices 12, 14, and 16. Routing table 13d is used by routing instructions 13c to route packets. Address table 13a stores the physical IP addresses of devices 12, 14 and 16 which map to corresponding logical IP addresses in routing table 13d.(**receiving at the distribution processor, network communications directed to the common network address; and distributing the received network communications to selected ones of the target hosts so as to distribute workload associated with the network communications**

These teachings of Basil are **also applicable to claims 10, 20, 29, 39 and 48** as "The physical IP address is the network (IP) address of the end point device and is used by the delivery protocol to deliver data packets through GRE tunnels to remote devices." And "Memory 13 also stores an address table 13a and a routing table 13d. In this regard, each device has several associated addresses. For example, device 12 has an address 35, which includes a logical IP address 35a of "200.10.1.1", and a physical IP address 35b of "192.115.65.12". The multicast address 35c ("232.10.5.1") of GRE tunnel 24 is also shown, as are addresses of devices 14 and 16. Routing table 13d stores network routing information, including the logical IP addresses of devices 12, 14, and 16. Routing table 13d is used by routing instructions 13c to route packets. Address table 13a stores the physical IP addresses of devices 12, 14 and 16 which map to corresponding logical IP addresses in routing table 13d", these devices are virtual Internet Protocol Address (VIPA) Distributor to provide a routing communication protocol stack which distributes connections to at least one dynamically routable VIPA (DVIPA) to a plurality of target communication protocol stacks).

Also as stated above and equally evident from Fig. 7, Basil discloses," Devices 12, 14 and 16 are routers, or other computing devices, which receive data packets (either from a GRE tunnel or a LAN) and which forward the data packets to their intended destinations (either via a GRE tunnel or on the LAN). For example, "local" device 12 receives payload data packets from PC 29 on

LAN 18 and forwards those packets to "remote" device 14 via GRE tunnel 24. Similarly, device 12 receives packets from GRE tunnel 24 and forwards those packets onto LAN 18. Whether a device is local or remote is a matter of perspective only. For example, to device 14, devices 12 and 16 are remote. Each device 12, 14 and 16 includes a memory 13 for storing computer instructions, and a processor 12a for executing those instructions to perform various functions, as shown in blown-up view 30. For example, routing instructions 13c cause device 12 to forward routing packets in accordance with **one or more of the routing protocols noted above. (Please also note these protocols as being as described in col. 2, line 54-65,"** Intermediary network 22 may be any type of network, such as a wide area network ("WAN") or the Internet, that supports IPv4 (Internet Protocol version 4), IP multicast routing, and IGMP (Internet Group Multicast Protocol). Examples of protocols that may be used to perform multicast routing are DVMRP (Distance Vector Multicast Routing Protocol), MOSPF (Multicast Open Shortest-Path First), and PIM (Protocol Independent Multicasting). Packets may also be "unicast" over intermediary network 22. Routes are distributed using protocols, such as RIP (Routing Information Protocol), OSPF (Open Shortest-Path First), and BGP (Border Gateway Protocol)") Dynamic GRE instructions 13b process GRE-encapsulated routing packets transmitted over GRE tunnel 24. (receiving inbound IPSec communications to the DVPA from the network at the routing communication protocol stack; performing IPSec processing of the received inbound IPSec communications at the routing communication protocol stack to

provide non-IPSec communications to a first target communication protocol stack associated with the received inbound IPSec communications; receiving outbound non-IPSec communications associated with the DVIPA from a second target communication protocol stack at the routing communication protocol stack; and performing IPSec processing on the received outbound non-IPsec communications at the routing communication protocol stack to provide outbound IPSec communications to the network corresponding to the received outbound non-IPSec communications.)

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless-

> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 3-13, 15-17, 20, 22- 32, 34-36, 39, 41-51, 53-55 are rejected under 35 U.S.C. 102(e) as being anticipated by Basil et al. (hereinafter Basil) (US 6, 779, 051 B1).

Referring to claim 1,

Basil teaches a method for providing secure communications over a network in a distributed workload environment (Fig. 1) having target hosts (Fig.1, element 29)

which are accessed through a distribution processor by a common network address (Fig. 1, elements 12, 14 and 16), the method comprising the steps of:

routing both inbound and outbound communications with target hosts which are associated with a secure network communication through the distribution processor (Figs.7, 12A, 12B); and

processing both inbound and outbound secure network communications at the distribution processor so as to provide network security processing of communications from the target host and network security processing of communications to the target host (Figs. 7, 12A, 12b).

receiving at the distribution processor, network communications directed to the common network address; (Abstract, Fig.1) and

distributing the received network communications to selected ones of the target hosts so as to distribute workload associated with the network communications (Figs.7, 12A, 12B).

Referring to claim 3,

Basil teaches a method according to Claim 2, further comprising the steps of:

determining if the received network communications are secure network communications which are to be distributed to ones of the target hosts (Fig.12A);

wherein the step of processing both inbound and outbound secure network

communications at the distribution processor comprises the step of processing the received network communications so as to provide generic communications to the ones of the plurality of target hosts if the received network

communications are secure network communications which are distributed to ones of the target hosts. (Figs. 7, 12A, 12B).

Referring to claim 4,

Basil teaches a method according to Claim 3, wherein the step of processing both inbound and outbound secure network communications further comprises the steps of:

receiving at the distribution processor communications from the ones of the target hosts which are associated with secure network communications (col.4, line 65-col. 5, line 5); and

processing the received communications from the ones of the target hosts so as to provide network security for the communications from the ones of the target hosts. (col.5, line 5-col. 6, line 4)

Referring to claim 5,

Basil teaches a method according to Claim 4, wherein the communications

received from the target hosts and the generic communications to ones of the plurality of target hosts are encapsulated in a generic routing format. (Figs. 12A and 12B)

Referring to claim 6,

Basil teaches a method according to Claim 4, wherein the generic communications are encapsulated in a generic routing format having sufficient information in a header of the generic routing format so as to authenticate the source of the communication between the distribution processor and ones of the plurality of target hosts. (col. 5, line 10-19).

Referring to claim 7,

Basil teaches a method according to Claim 4, wherein the communications received from the target hosts at the distribution processor and the generic communications to ones of the plurality of target hosts from the distribution processor are communicated over trusted communication links. (Fig. 7, elements 18 and 19).

Referring to claims 8 and 9,

Basil teaches a method according to Claim 4, further comprising the step of establishing common IP filters for communications encapsulated in a generic routing format at the distribution processor and the plurality of target hosts, and a method according to Claim 8, wherein the common IP filters bypass IP filtering for inbound communications encapsulated in the generic routing format. (col. 5, line 31-34, Fig. 12A, element 160).

Referring t claim 10,

Basil teaches a method providing internet Protocol Security (IPSec) communications from a network to a plurality of application instances executing on a cluster of data processing systems utilizing virtual Internet Protocol Address (VIPA) Distributor to provide a routing communication protocol stack which distributes connections to at least one dynamically routable VIPA (DVIPA) to a plurality of target communication protocol stacks (Figs, 7, 12A, 12B), the method comprising the steps of:

receiving inbound IPSec communications to the DVPA from the network at the routing communication protocol stack (Fig. 1);

performing IPSec processing of the received inbound IPSec communications at the routing communication protocol stack to provide non-IPSec communications to a first target communication protocol stack associated with the received inbound IPSec communications (Figs. 7, 12A, 12B);

receiving outbound non-IPSec communications associated with the DVIPA from a second target communication protocol stack at the routing communication protocol stack (Figs. 7, 12A, 12B); and

performing IPSec processing on the received outbound non-IPsec communications at the routing communication protocol stack to provide outbound IPSec communications to the network corresponding to the received outbound non-IPSec communications. (Figs. 7, 12A, 12B).

Referring to claim 11,

Basil teaches a method according to Claim 10, wherein the target communication protocol stacks carry out the step of sending outbound communications associated with a connection utilizing IPSec which is routed through the routing communication protocol stack to the routing communication protocol stack for IPSec processing. (col. 3, line 14-20)

Referring to claim 12,

Basil teaches a method according to Claim 10, wherein the second target communication protocol stack further carries out the steps of: determining if an outbound communication associated with a connection utilizing IPSec is routed through the routing communication protocol stack; sending non-IPSec communications for the connection utilizing IPSec to the routing communication

protocol stack if the connection utilizing IPSec is routed through the routing communication protocol stack; and

IPSec processing communications if the connection utilizing IPSec is not routed through the routing communication protocol stack. (Figs. 7, 12A, 12B).

Referring to claim 13,

Basil teaches a method according to Claim 10, where the routing communication protocol stack and the plurality of target communication protocol stacks communicate utilizing a trusted communication link. (Fig. 7, elements 18 and 19).

Referring to claim 15,

Basil teaches a method according to Claim 10, wherein the routing communication protocol stack further carries out the steps of: encapsulating the IPSec processed communications in a generic routing encapsulation (GRE) formatted communication; and sending the GRE formatted communication to the first target communication protocol stack over a trusted communication link; wherein the step of receiving outbound non-IPSec communications from a second target communication protocol stack at the routing communication protocol stack comprises the step of receiving a GRE encapsulated communication from the second target communication protocol stack; and wherein the step of performing IPSec processing on the received outbound non-IPSec communications at the routing communication protocol stack to provide outbound IPsec communications to the network corresponding to the received outbound non-IPSec communications comprises the steps of: extracting a non-IPSec communication from the received GRE encapsulated communication; and

IPSec processing the extracted non-IPSec communication. (Fig. 7, elements 87 and 147).

Referring to claims 16 and 17,

Basil teaches a method according to Claim 15, further comprising the steps of establishing common IP filters for GRE encapsulated communications at the routing communication protocol stack and the target communication protocol stacks, and a method according to Claim 16, wherein the common P filters bypass P filtering for inbound GRE encapsulated communications.(col. 5, line 31-34, Fig. 12, element 160).

Referring to claim 20,

Claim 20 is a claim to a system that carries out the method of claim 1. Therefore, claim 20 is rejected for the reasons set forth for claim 1.

Referring to claim 22,

Claim 22 is a claim to a system that carries out the method of claim 3. Therefore, claim 22 is rejected for the reasons set forth for claim 3.

Referring to claim 23,

Claim 23 is a claim to a system that carries out the method of claim 4. Therefore, claim 23 is rejected for the reasons set forth for claim 4.

Referring to claim 24,

Claim 24 is a claim to a system that carries out the method of claim 5. Therefore, claim 24 is rejected for the reasons set forth for claim 5.

Referring to claim 25,

Claim 25 is a claim to a system that carries out the method of claim 6. Therefore, claim 25 is rejected for the reasons set forth for claim 6.

Referring to claim 26,

Claim 26 is a claim to a system that carries out the method of claim 7. Therefore, claim 26 is rejected for the reasons set forth for claim 7.

Referring to claim 27,

Claim 27 is a claim to a system that carries out the method of claim 8. Therefore, claim 27 is rejected for the reasons set forth for claim 8.

Referring to claim 28,

Claim 28 is a claim to a system that carries out the method of claim 9. Therefore, claim 28 is rejected for the reasons set forth for claim 9.

Referring to claim 29,

Claim 29 is a claim to a system that carries out the method of claim 10. Therefore, claim 29 is rejected for the reasons set forth for claim 10.

Referring to claim 30,

Claim 30 is a claim to a system that carries out the method of claim 11. Therefore, claim 30 is rejected for the reasons set forth for claim 11.

Referring to claim 31,

Claim 31 is a claim to a system that carries out the method of claim 12. Therefore, claim 31 is rejected for the reasons set forth for claim 12.

Referring to claim 32,

Claim 32 is a claim to a system that carries out the method of claim 13. Therefore, claim 32 is rejected for the reasons set forth for claim 13.

Referring to claim 34,

Claim 34 is a claim to a system that carries out the method of claim 15. Therefore, claim 34 is rejected for the reasons set forth for claim 15.

Referring to claims 35 and 36,

Claims 35 and 36 are claims to a system that carries out the methods of claims 16 and 17. Therefore, claims 35 and 36 are rejected for the reasons set forth for claims 16 and 17.

Referring to claim 39,

Claim 39 is a claim to a computer readable medium having computer readable program code that carries out the method of claim 1. Therefore, claim 39 is rejected for the reasons set forth for claim 1.

Referring to claim 41,

Claim 41 is a claim to a computer readable medium having computer readable program code that carries out the method of claim 3. Therefore, claim 41 is rejected for the reasons set forth for claim 3.

Referring to claim 42,

Claim 42 is a claim to a computer readable medium having computer readable program code that carries out the method of claim 4. Therefore, claim 42 is rejected for the reasons set forth for claim 4.

Referring to claim 43,

Claim 43 is a claim to a computer readable medium having computer readable program code that carries out the method of claim 5. Therefore, claim 43 is rejected for the reasons set forth for claim 5.

Referring to claim 44,

Claim 44 is a claim to a computer readable medium having computer readable program code that carries out the method of claim 6. Therefore, claim 44 is rejected for the reasons set forth for claim 6.

Referring to claim 45,

Claim 45 is a claim to a computer readable medium having computer readable program code that carries out the method of claim 7. Therefore, claim 45 is rejected for the reasons set forth for claim 7.

Referring to claims 46 and 47,

Claims 46 and 47 are claims to computer readable medium having computer readable program code that carries out the method of claims 8 and 9. Therefore, claims 46 and 47 are rejected for the reasons set forth for claims 8 and 9.

Referring to claim 48,

Claim 48 is a claim to a computer readable medium having computer readable program code that carries out the method of claim 10. Therefore, claim 48 is rejected for the reasons set forth for claim 10.

Referring to claim 49,

Claim 49 is a claim to a computer readable medium having computer readable program code that carries out the method of claim 11. Therefore, claim 49 is rejected for the reasons set forth for claim 11.

Referring to claim 50,

Claim 50 is a claim to a computer readable medium having computer readable program code that carries out the method of claim 12. Therefore, claim 50 is rejected for the reasons set forth for claim 12.

Referring to claim 51,

Claim 51 is a claim to a computer readable medium having computer readable program code that carries out the method of claim 13. Therefore, claim 51 is rejected for the reasons set forth for claim 13.

Referring to claim 53,

Claim 53 is a claim to a computer readable medium having computer readable program code that carries out the method of claim 15. Therefore, claim 53 is rejected for the reasons set forth for claim 15.

Referring to claim 54,

Claim 54 is a claim to a computer readable medium having computer readable program code that carries out the method of claim 16. Therefore, claim 54 is rejected for the reasons set forth for claim 16.

Referring to claim 55,

Claim 55 is a claim to a computer readable medium having computer readable program code that carries out the method of claim 17. Therefore, claim 55 is rejected for the reasons set forth for claim 17.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to

> be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 14, 18, 19, 33, 37, 38, 52, 56 and 57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Basil et al. (hereinafter Basil) (US 6, 779, 051 B1) in view of Klein (US 5, 754, 856)

Referring to claim 14,

Keeping in mind the teachings of the reference Basil as stated above, the reference fails to teach wherein the cluster of data processing systems comprises a Sysplex and wherein the trusted communication link is a cross coupling facility of the Sysplex. The reference Klein teaches "In accordance with the present invention the native IBM XCF facility available in MVS/ESA is used as an asynchronous transport mechanism between MVS tasks which may reside on the same or different physical machines as long as they reside in a MVS SYSPLEX configuration.", col.1, lines 20-25. Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention was made to combine the teachings of Basil to the system of Klein such that "Each message is sent via the XCF facility to each of the eligible recipient tasks. Each recipient task includes a receiving module for receiving and queuing the messages and notifying the task that the message has arrived. This technique provides fast and low overhead transport common to tasks on the same or different platforms. Also, the invention includes the ability to mirror the message to multiple named tasks from a single source task transparently to the source task. Further, the message may be sent to the first named task in a group of

eligible tasks so that when a task becomes inactive the message is sent to the next task in the directory with the same name automatically, as taught by Klein.

Referring to claim 18,

Keeping in mind the teachings of Basil as stated above, although the GRE encapsulated communications, the Basil fails to teach wherein the cluster of data processing systems comprises a Sysplex and wherein the routing communication protocol stack and the target communication protocol stacks communicate utilizing a cross coupling facility (XCF) of the Sysplex and wherein communications include an XCF source address and an XCF destination address in an outer GRE header (Note : GRE - GRE is a protocol that enables the encapsulation of an arbitrary network layer protocol (the payload protocol) by another arbitrary network layer protocol (the delivery protocol). GRE tunnels are virtual tunnels that are created on an intermediary network and that are used to transmit GRE-encapsulated data packets from a first network to a second network. GRE tunnels are often used to create a virtual private network ("VPN"). The reference Klein teaches "In accordance with the present invention the native IBM XCF facility available in MVS/ESA is used as an asynchronous transport mechanism between MVS tasks which may reside on the same or different physical machines as long as they reside in a MVS SYSPLEX configuration.", col.1, lines 20-25. Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention was made to combine the teachings of Basil to the system of Klein such that "Each message is sent via the XCF facility to each of the eligible recipient tasks. Each recipient task includes a receiving

module for receiving and queuing the messages and notifying the task that the message has arrived. This technique provides fast and low overhead transport common to tasks on the same or different platforms. Also, the invention includes the ability to mirror the message to multiple named tasks from a single source task transparently to the source task. Further, the message may be sent to the first named task in a group of eligible tasks so that when a task becomes inactive the message is sent to the next task in the directory with the same name automatically, as taught by Klein.

Referring to claim 19,

Keeping in mind the teachings of the reference Basil as stated above, the GRE encapsulated communications, however, the reference fails to teach communication was received over an XCF link. The reference Klein teaches "In accordance with the present invention the native IBM XCF facility available in MVS/ESA is used as an asynchronous transport mechanism between MVS tasks which may reside on the same or different physical machines as long as they reside in a MVS SYSPLEX configuration.", col.1, lines 20-25 (communication was received over an XCF link). Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention was made to combine the teachings of Basil to the system of Klein such that anything that is not received over XCF link can be discarded by the IPsec. Also, Each message is sent via the XCF facility to each of the eligible recipient tasks. Each recipient task includes a receiving module for receiving and queuing the messages and notifying the task that the message has arrived. This technique provides fast and low overhead

transport common to tasks on the same or different platforms. Also, the invention includes the ability to mirror the message to multiple named tasks from a single source task transparently to the source task. Further, the message may be sent to the first named task in a group of eligible tasks so that when a task becomes inactive the message is sent to the next task in the directory with the same name automatically, as taught by Klein.

Referring to claim 33,

Claim 33 is a claim to a system that carries out the method of claim 14. Therefore, claim 33 is rejected for the reasons set forth for claim 14.

Referring to claims 37 and 38,

Claims 37 and 38 are claims to a system that carries out the methods of claims 18 and 19. Therefore, claims 37 and 38 are rejected for the reasons set forth for claims 18 and 19.

Referring to claim 52,

Claim 52 is a claim to a computer readable medium having computer readable program code that carries out the method of claim 14. Therefore, claim 52 is rejected for the reasons set forth for claim 14.

Referring to claims 56 and 57,

Claims 56 and 57 are claims to computer readable medium having computer readable program code that carries out the method of claims 18 and 19. Therefore, claims 56 and 57 are rejected for the reasons set forth for claims 18 and 19.

Conclusion

Examiner's note: Examiner has cited particular columns and line numbers in the references as applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ashok B. Patel whose telephone number is (571) 272-3972. The examiner can normally be reached on 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John A. Follansbee can be reached on (571) 272-3964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Abp
***

JOHN FOLLANSBEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100